Beverage can

The invention refers to a beverage can with an upper can bead surrounding a can opening closed by a closing member, and in particular to a beverage can as commonly used for beer, lemonade and similar beverages.

Conventional beverage cans containing non-alcoholic beverages or beer consist of containers made from deep-drawn aluminium or tin plate. A tear-out closing member is provided in the top wall, which is connected with the remainder of the top wall along a rated breaking line. The top wall is fixed to the container by an upright can collar formed as a flange. In order to open the beverage can, a handle connected with the tear-out closing member is pushed up and then pulled, whereby the closing member is torn off along a rated breaking line so as to clear the can opening. With beverage cans, one generally drinks directly from the can, i.e. without first pouring the contents of the can into a glass. When drinking directly from the can, the upper lip touches the edge of the can opening. Here, contaminants may reach the upper lip and cause infections. The edge of the can opening being sharp, injuries to the upper lip may also occur. All in all, drinking from such a beverage can is uncouth and sometimes even dangerous.

From German Utility Model 201 16 724, a beverage can is known where the can collar that surrounds the top wall is projected upward thereby making it unnecessary to press the lips against the edge of the opening. This requires designing and manufacturing special beverage cans with upward projecting can collars. The can collar impedes access to the handle of the closing member. Such beverage cans require more space, especially when stacked, stored or transported.

It is the object of the invention to provide a beverage can wherein drinking from the can is facilitated without having to restructure the can.

The object is solved according to the invention with the features of claim 1. Accordingly, a drinking cap is provided for being clamped onto the can collar, thus being removably attached to the beverage can. The drinking cap is a separate part that is set on the beverage can if needed or before use of the can. The drinking cap may be made from a material different from that of the can. In particular, it is advantageous to make the drinking cap from a plastics material while the can is made of tin plate. Producing the drinking cap from plastics material is advantageous in that the drinking cap can be made in a simple manner and in a single-step production process and in that a plastics material may be chosen that is not too hard and feels comfortable when touched with the lips. Thus, the drinking cap forms a sort of a cup clamped on the can and having an opening in its bottom wall that is in communication with the can opening. The drinking cap may either be provided sitting on the can or as a separate accessory. Thus, it is possible for a user to carry his own drinking cap and to use it with several cans. Further, it is possible for a plurality of people drinking from a common can to use their own drinking cap, respectively.

In an advantageous embodiment of the invention it is provided that the drinking cap includes an additional container. The additional container may contain pastries, for example, such as salt sticks, miniature pretzels or the like. In this case, a customer will not only receive the drinking cap when buying a beverage can, but also an amount of an addition going well with the respective beverage. Preferably, the additional container is clamped into the drinking opening of the drinking cap, filling the same. It may be pulled from the drinking cap in a simple manner and be opened subsequently. The additional container may have a tear-open cover wall, similar to those of jam packages. The additional container particularly consists of a deep-drawn foil. This may have a flange-like edge, as is conventional. When inserting the additional container into the drinking cap, the edge abuts the drinking opening beyond which it extends laterally. By engaging the edge of the additional container the same may be pulled from the drinking cap.

According to a preferred embodiment of the invention, the drinking cap comprises a funnel supported on the top wall of the beverage can, which guides liquid from the can opening to the drinking opening. The funnel prevents liquid

accumulation on that part of the can top wall that surrounds the can opening, which liquid does not drain off due to the can collar. The can cap thus prevents the spilling of residual liquid and the accompanying soiling.

Suitably, the funnel opening at the lower end of the funnel is shaped and sized such that it substantially corresponds to the can opening. However, the funnel opening should be slightly narrower than the can opening to prevent any liquid accumulation. In this case, the funnel is supported on the top wall by the funnel opening pressing against the can opening.

The drinking cap may have a circumferential wall with an inner bead snapping behind the can collar. Thus, a fixed snapped-on seat of the drinking cap on the beverage can is made possible.

The following is a detailed description of an embodiment of the invention with reference to the drawings:

In the Figures:

- Fig. 1 shows a perspective exploded view of a beverage can with a drinking cap and an additional container,
- Fig. 2 is a lateral view of the drinking cap with the additional container therein, sitting on the beverage can,
- Fig. 3 is a longitudinal sectional view of the beverage can with drinking cap and additional container, and
- Fig. 4 is a section along line IV IV in Fig. 3.

The drawings illustrate a conventional beverage can 10. It consists of a can container 10 of aluminium sheet or tin plate. In the upper portion, the can container 11 has a taper 12 terminating in a circular can collar 13. The can collar 13 is a flanged rim connecting the top wall 14 with the circumferential wall of the can container 11. The can collar 13 is bent outward.

In the top wall 14, a tear line 15 defines the closing member 16. The closing member 16 is connected with a handle 17 having a handle opening. By pulling the handle 17 up, the closing member 16 can be torn from the top wall 14 to clear the can opening. The can collar 13 projects upward beyond the bulging top wall 14.

According to the invention, a drinking cap 20 is provided that is clamped on the beverage can 10. The drinking cap 20 is a unitary part of plastics material. It has a cylindrical circumferential wall 21 with an inner bead 22 at the lower end and a small outer bead 23 at the top end, which surrounds a drinking opening 24.

Inside the drinking cap there is a funnel 25 integrally connected with the lower portion of the circumferential wall 21, narrowing downward and ending in a lower funnel opening 26. The funnel opening is almost congruent with the can opening. It presses against the can opening, thereby connecting the can opening with the funnel 25.

The drinking cap 20 is made as a single piece from a rigid, yet not hard plastics material. The lower portion of the circumferential wall 21 surrounds the can collar 13 which thus projects into the triangular space between the funnel 25 and the lower portion of the circumferential wall 21. The drinking cap 20 is set onto the can collar 13 and pressed down, the circumferential wall 21 elastically deforming in the lower portion until the inner bead 22 catches behind the can collar 13 as illustrated in Fig. 3. The drinking cap is now immovably connected with the beverage can 10. Now, with the additional container 30 removed, the closing member 16 can be pulled out by pulling at the handle 17 previously bent up (Figure 3). Setting the drinking opening 24 to the mouth, the user may drink from the can.

Alternatively, it is also possible to tear off the closing member before setting the drinking cap on the can.

The additional container 30 consists of a deep-drawn foil. It has a cup portion 31 forming a bottom 32 and a protruding flange-like rim 33 at the opposite end. The

rim 33 is supported at the edge of the drinking opening 24, whereas the sup portion 31 is situated inside the drinking cap 20. the additional container 30 is sealed air-tight with a tear-off cover foil 34. Its interior 35 serves to receive pastries that may be eaten while drinking the contents of the can.

The upper end of the circumferential wall of the additional container 30 is provided with an enlargement 36 that clampingly fits into the drinking opening 24 to obtain a clamped fit of the additional container in the drinking cap. By gripping the rim 33, the additional container 30 can be pulled from the drinking cap.

Besides serving as a container, the additional container 30 also has the effect of protecting the interior of the drinking cap 20 and the drinking opening 24 against contamination.